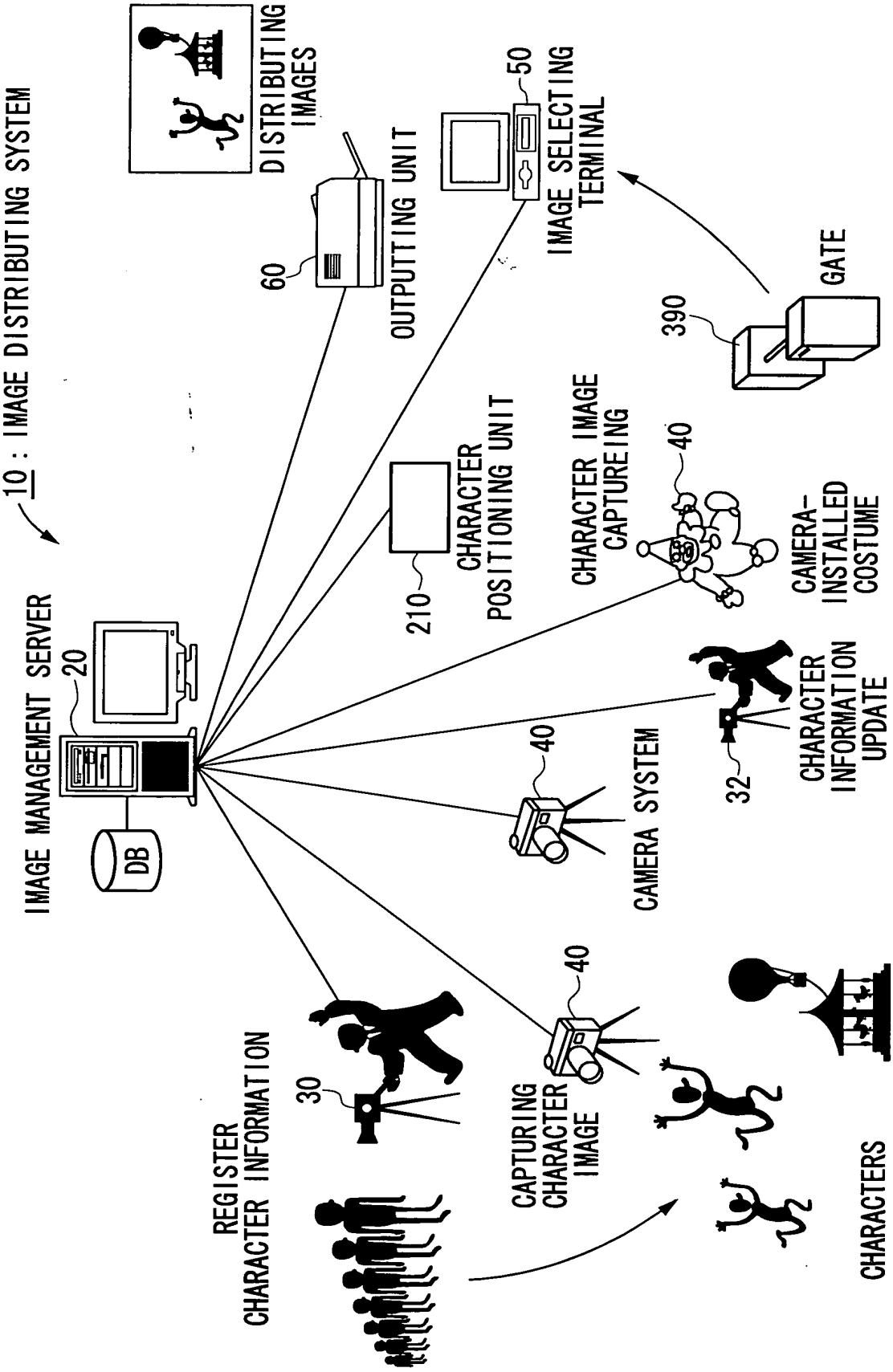
10 : IMAGE DISTRIBUTING SYSTEM
IMAGE MANAGEMENT SERVER
20
DB
DISTRIBUTING IMAGES
OUTPUTTING UNIT
60
IMAGE SELECTING TERMINAL
50
GATE
390
CHARACTER POSITIONING UNIT
210
CHARACTER IMAGE CAPTURING
40
CAMERA-INSTALLED COSTUME
CAMERA SYSTEM
40
CHARACTER INFORMATION UPDATE
32
REGISTER CHARACTER INFORMATION
30
CAPTURING CHARACTER IMAGE
40
CHARACTERS

FIG. 1

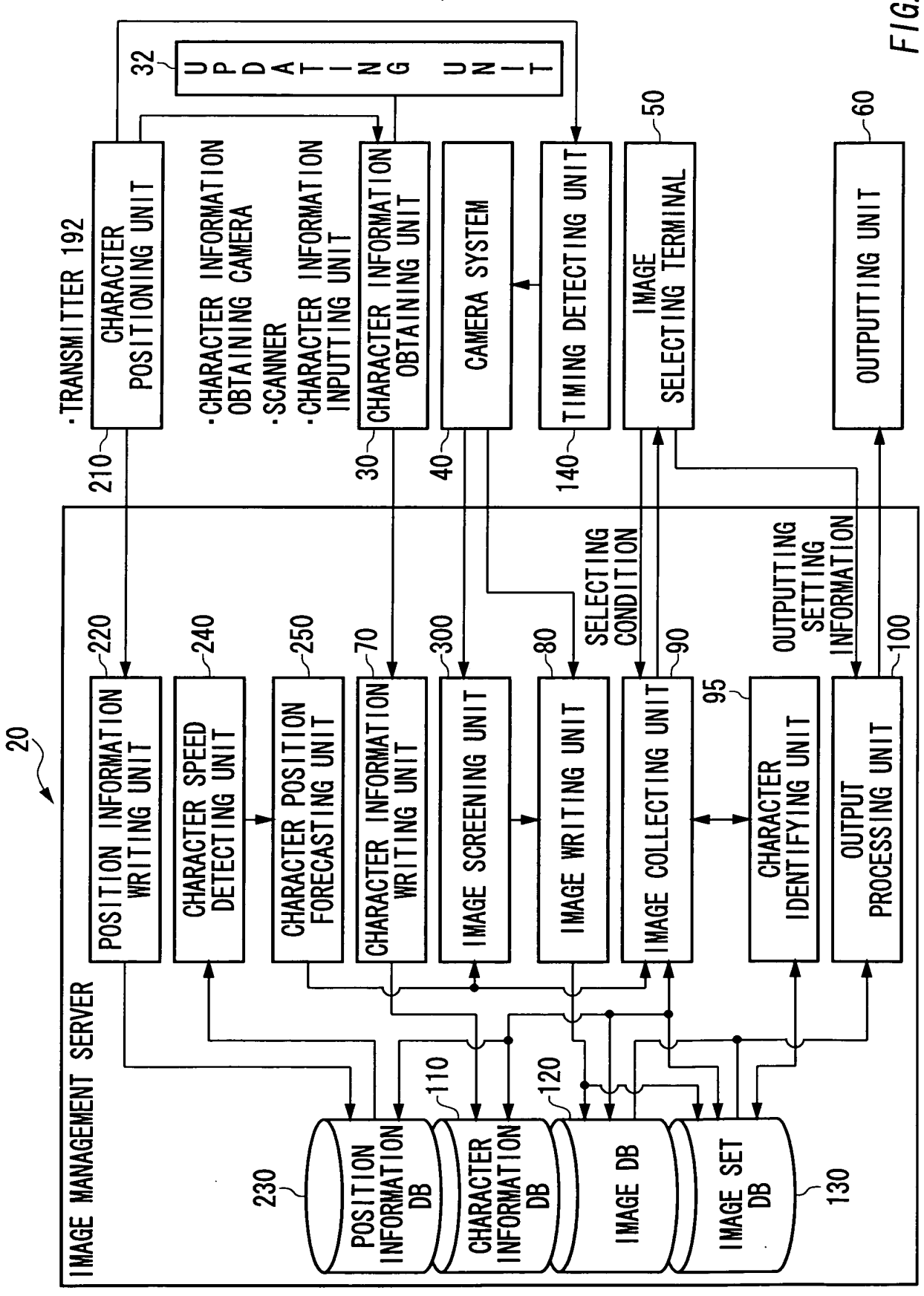
IMAGE MANAGEMENT SERVER
20
·TRANSMITTER 192
CHARACTER POSITIONING UNIT
210
·CHARACTER INFORMATION OBTAINING CAMERA
·SCANNER
·CHARACTER INFORMATION INPUTTING UNIT
CHARACTER INFORMATION OBTAINING UNIT
30
CAMERA SYSTEM
40
TIMING DETECTING UNIT
140
IMAGE SELECTING TERMINAL
50
OUTPUTTING UNIT
60
UPDATING UNIT
32
POSITION INFORMATION WRITING UNIT
220
CHARACTER SPEED DETECTING UNIT
240
CHARACTER POSITION FORECASTING UNIT
250
CHARACTER INFORMATION WRITING UNIT
70
IMAGE SCREENING UNIT
300
IMAGE WRITING UNIT
80
SELECTING CONDITION
IMAGE COLLECTING UNIT
90
95
CHARACTER IDENTIFYING UNIT
OUTPUTTING SETTING INFORMATION
OUTPUT PROCESSING UNIT
100
110
120
230
POSITION INFORMATION DB
CHARACTER INFORMATION DB
IMAGE DB
IMAGE SET DB
130

FIG. 2

TOE020 "EP976860

CHARACTER DB 110

CHARACTER ID	FRIEND ID	CHARACTER INFORMATION		ENTRY TIME	POSITION INFORMATION	RESTRICTION FOR OTHERS NOT TO OBTAIN ONE'S IMAGE
		DATA AT ENTRY	UPDATE DATA			
1	4, 5	FACE PARAMETER(1)	NO	9:00	9:10=POINT A	YES
2	3	FACE PARAMETER(2)	UPDATED FACE PARAMETER(2)	9:15	9:30=POINT B, 10:00=POINT C, ...	NO
3	2	FACE PARAMETER(3)	NO	9:20	9:30=POINT B, 10:00=POINT C, ...	NO

FIG. 3

KAKU
Q65248
IMAGE COLLECTING SYSTEM AND METH
THEREOF
Filed: July 3, 2001
Darryl Mexic 202-293-7060
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3/26
FF-0170

IMAGE DB 120

IMAGE ID	IMAGE CAPTURING PROPERTY			IDENTIFIED CHARACTER ID				
	CAMERA ID	POSITION INFORMATION						
		PLACE	TIME					
1	5	POINT A	10:00	1				
2	6	POINT A	10:01	2	3			
3	1	POINT B	10:03	8	13			

FIG. 4

IMAGE SET DB 130

SET IMAGE ID		IMAGE ID					
ANGLE SET	CHRONOLOGICAL SET						
A1		11	12	13	14	15	
A2		6	7	8			
	T1	15	17	20	24		

FIG. 5

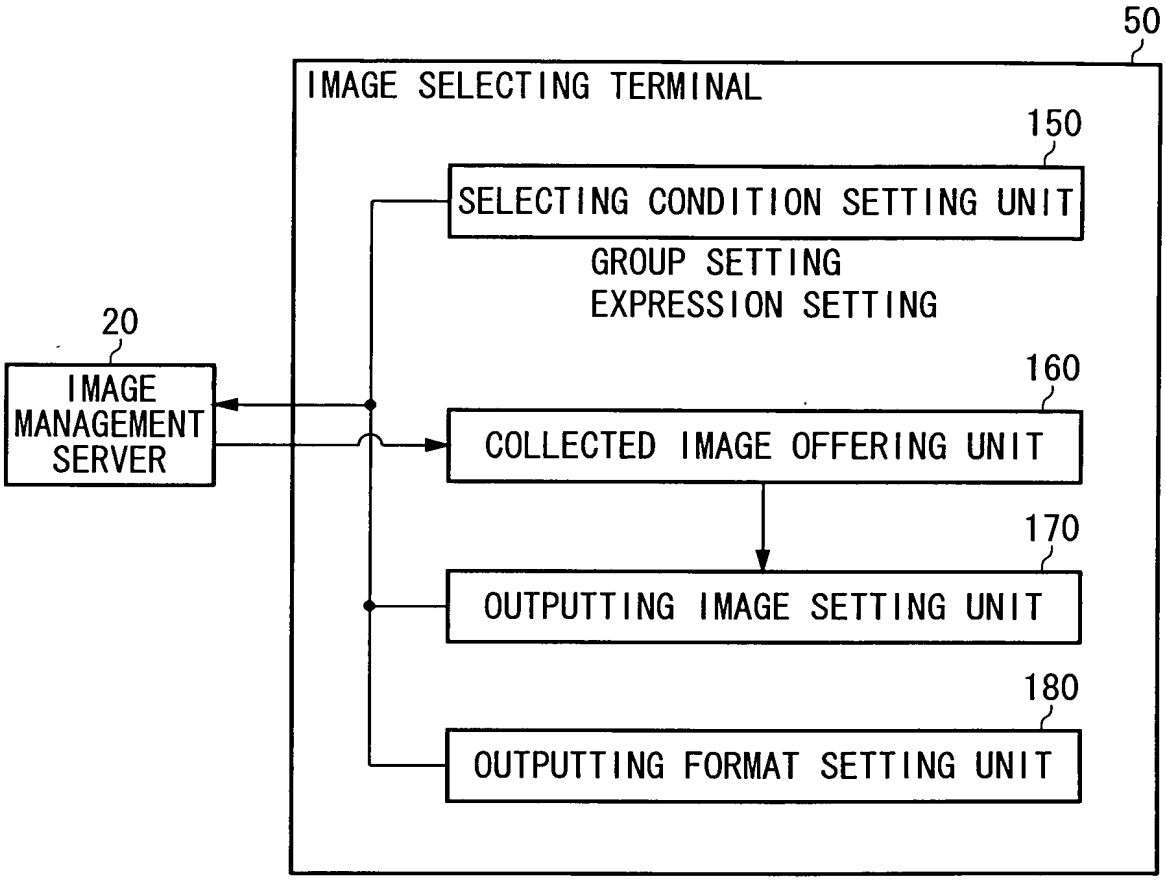

50
IMAGE SELECTING TERMINAL
150
SELECTING CONDITION SETTING UNIT
GROUP SETTING
EXPRESSION SETTING
20
IMAGE MANAGEMENT SERVER
160
COLLECTED IMAGE OFFERING UNIT
170
OUTPUTTING IMAGE SETTING UNIT
180
OUTPUTTING FORMAT SETTING UNIT

FIG. 6

95:CHARACTER IDENTIFYING UNIT

SET IMAGE ID	IMAGE ID
A1(ANGLE SET)	11 12 13 14 15

INCLUDES CHARACTER X IN COMMON

↓

THE CHARACTER X IN IMAGE ID 11 IS IDENTIFIED AS CHARACTER ID 19

↓

THE CHARACTER X IN IMAGES ID 12 THROUGH 15 IS ALSO IDENTIFIED AS CHARACTER ID 19

FIG. 7A

0603V3 :0603V3 04

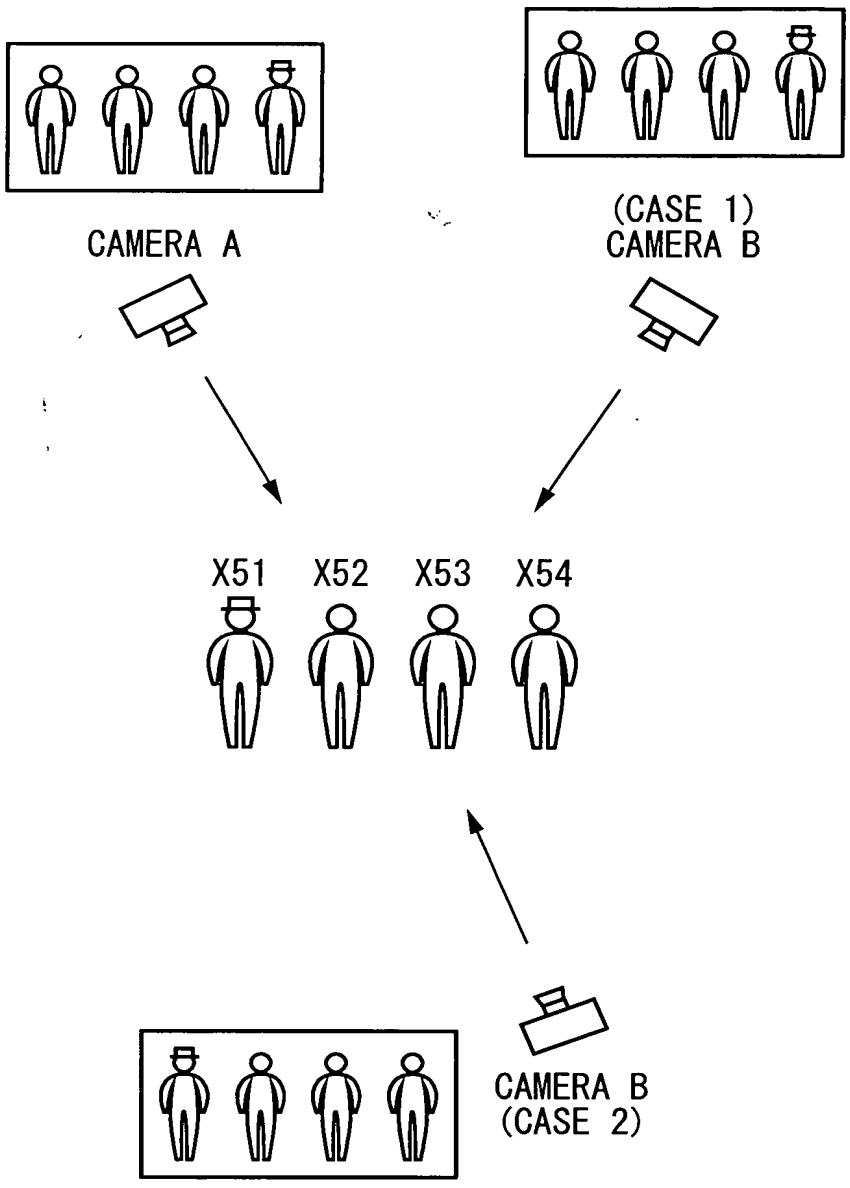


FIG. 7B

P0804-0805US

95:CHARACTER IDENTIFYING UNIT

SET IMAGE ID	IMAGE ID
A2(ANGLE SET)	51 52

INCLUDE CHARACTER
X51, X52, X53, AND X54
IN COMMON

↓

EACH OF THE PERSONS IN IMAGE ID 51
IS IDENTIFIED

↓

EACH OF THE PERSONS ARE VERIFIED
(FIG. 7B)

↓

IDENTIFY EACH PERSON

FIG. 7C

EFS-Web 2.0.05 Build 0.0.3 - 09/06/2004

95:CHARACTER IDENTIFYING UNIT

SET IMAGE ID	IMAGE ID
T1(CHRONOLOGICAL SET)	21 22 23 24 25

INCLUDES CHARACTER Y IN COMMON

↓

THE CHARACTER Y IN IMAGE ID 21 IS IDENTIFIED AS CHARACTER ID 29

↓

THE CHARACTER Y IN IMAGES ID 22 THROUGH 25 IS ALSO IDENTIFIED AS CHARACTER ID 29

FIG. 8

JP2002-203248A 2002.07.19

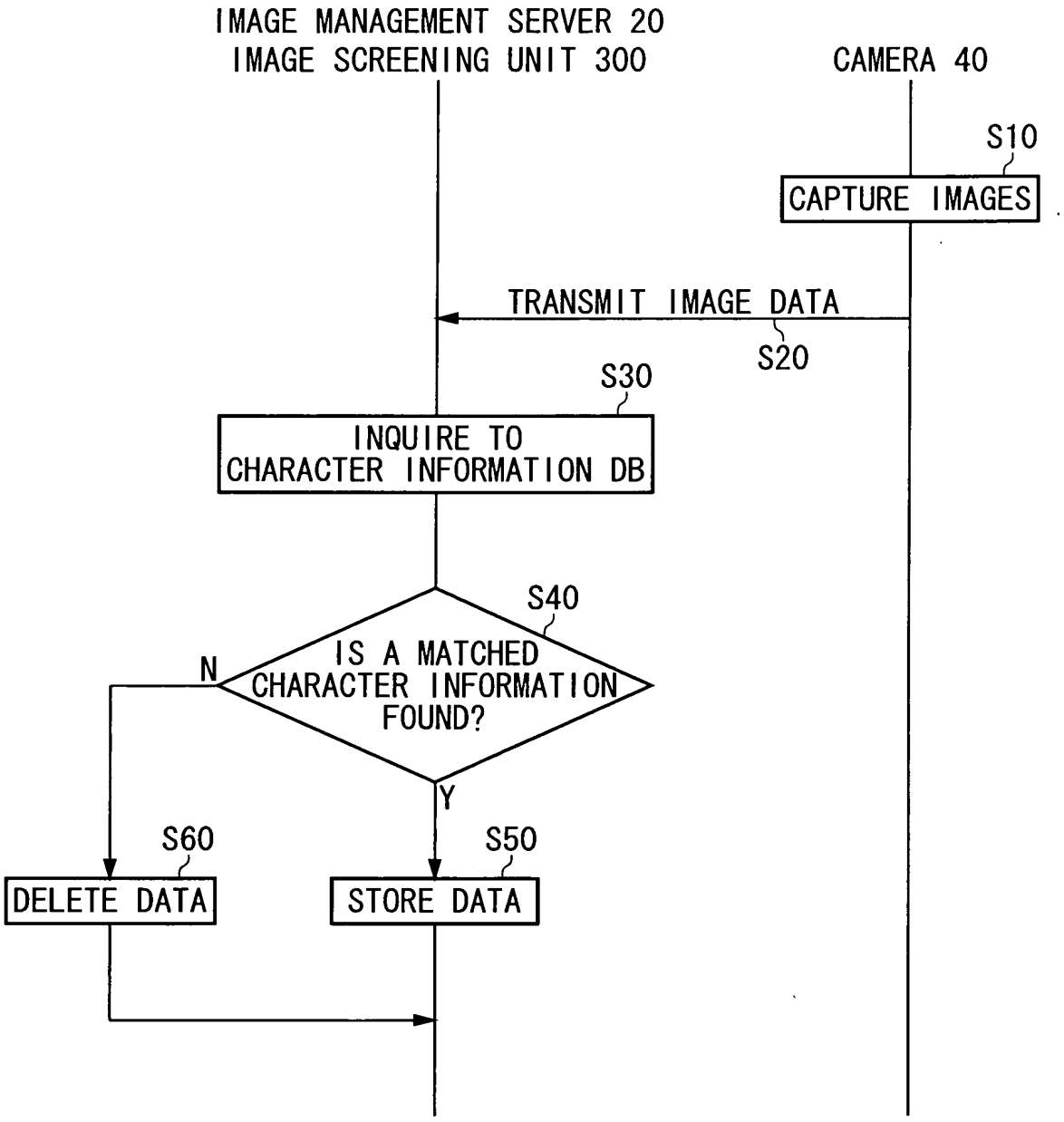
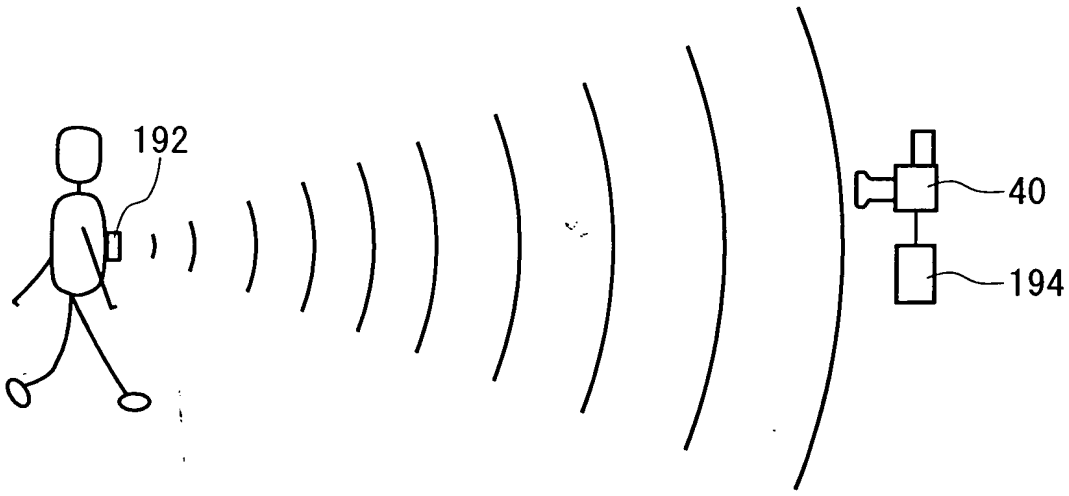


IMAGE MANAGEMENT SERVER 20
IMAGE SCREENING UNIT 300
CAMERA 40
S10
CAPTURE IMAGES
TRANSMIT IMAGE DATA
S20
S30
INQUIRE TO
CHARACTER INFORMATION DB
S40
IS A MATCHED
CHARACTER INFORMATION
FOUND?
N
Y
S60
DELETE DATA
S50
STORE DATA

FIG. 9



DETECT POSITION OF A CHARACTER

↓

THE CHARACTER COMES TO A PREDETERMINED POSITION

↓

CAPTURE IMAGE

FIG. 10

0603.0503.0403.0303.0203.0103

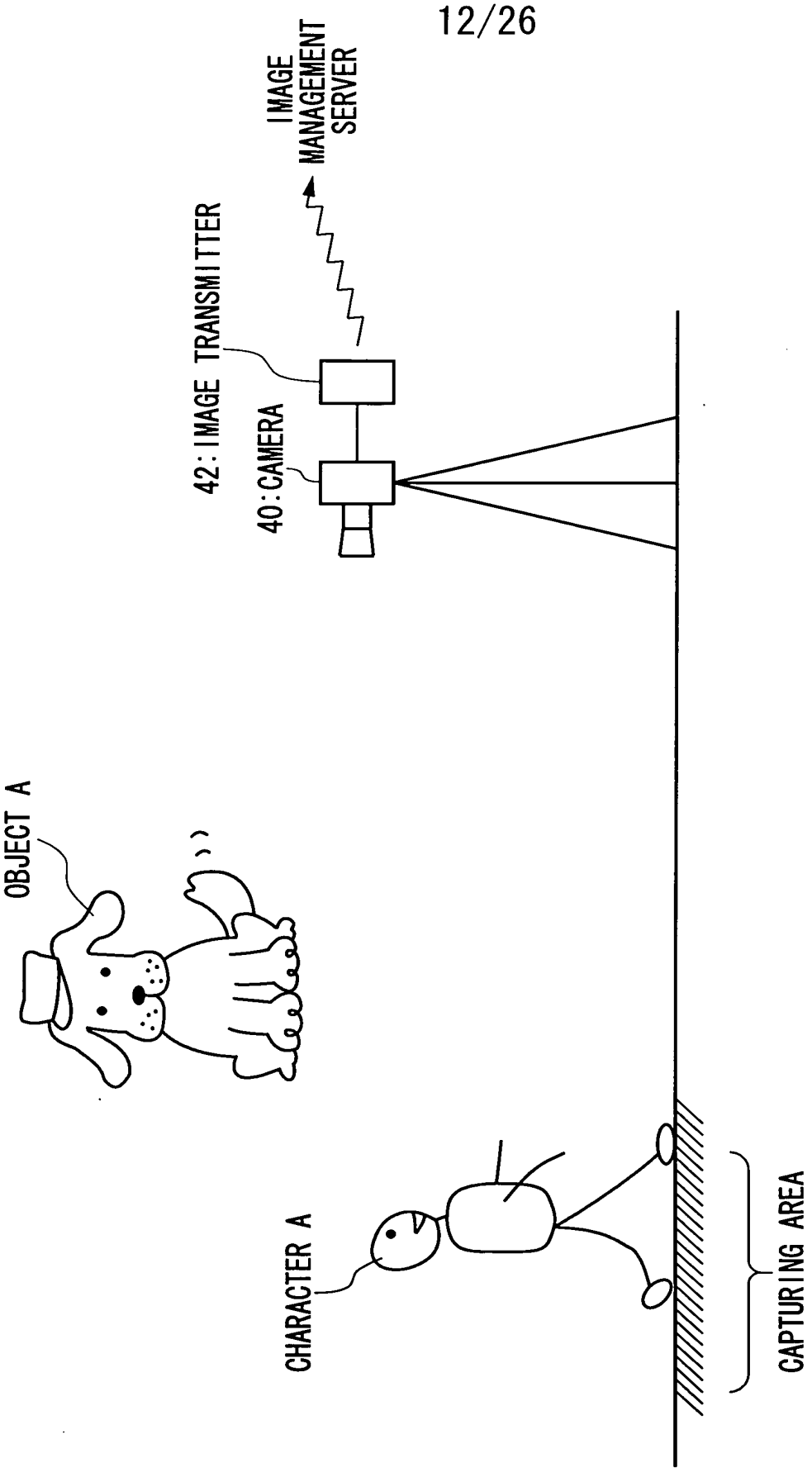


IMAGE MANAGEMENT SERVER
42: IMAGE TRANSMITTER
40: CAMERA
OBJECT A
CHARACTER A
CAPTURING AREA

FIG. 11

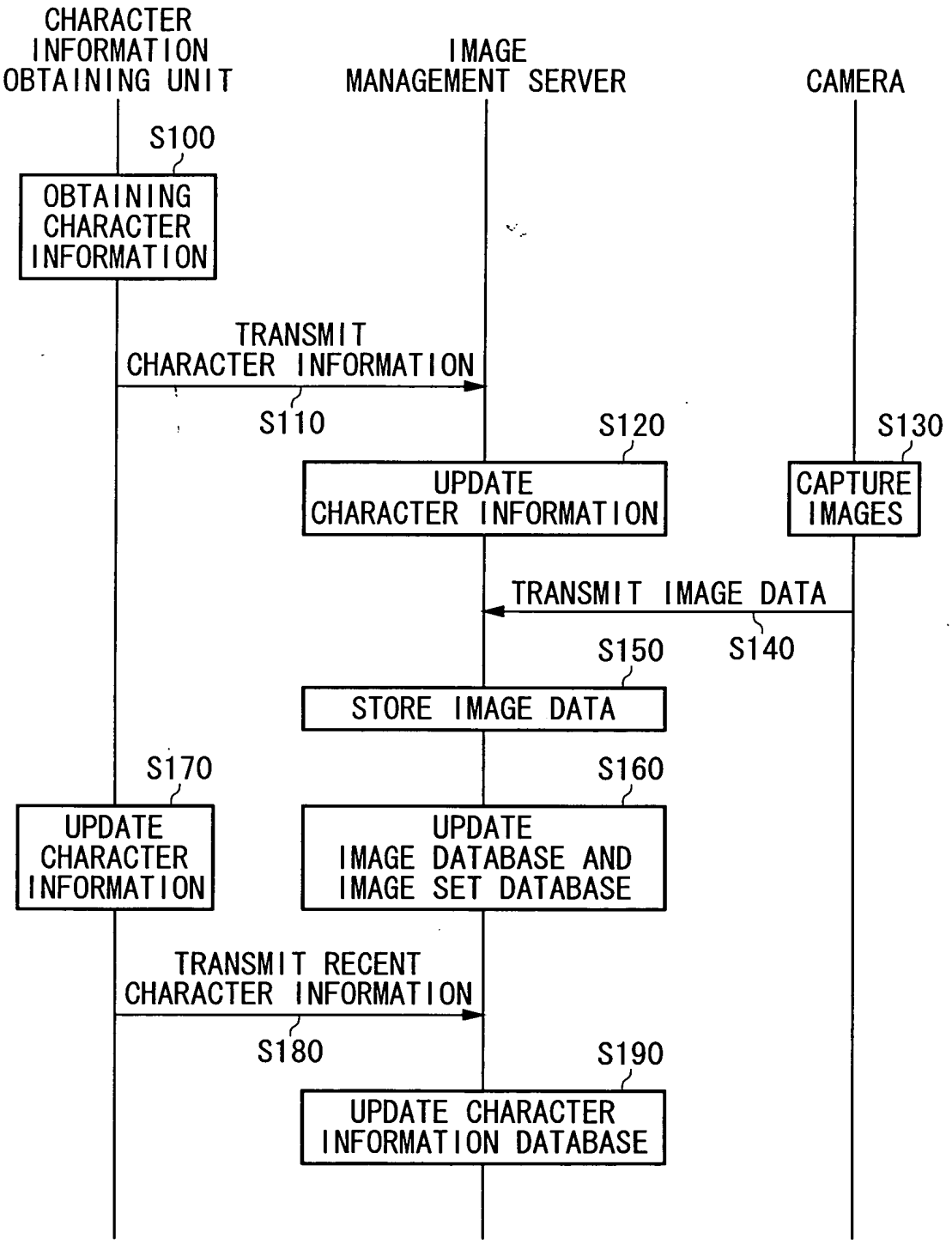

CHARACTER INFORMATION OBTAINING UNIT
IMAGE MANAGEMENT SERVER
CAMERA
S100
OBTAINING CHARACTER INFORMATION
TRANSMIT CHARACTER INFORMATION
S110
S120
UPDATE CHARACTER INFORMATION
S130
CAPTURE IMAGES
TRANSMIT IMAGE DATA
S140
S150
STORE IMAGE DATA
S170
UPDATE CHARACTER INFORMATION
S160
UPDATE IMAGE DATABASE AND IMAGE SET DATABASE
TRANSMIT RECENT CHARACTER INFORMATION
S180
S190
UPDATE CHARACTER INFORMATION DATABASE

FIG. 12

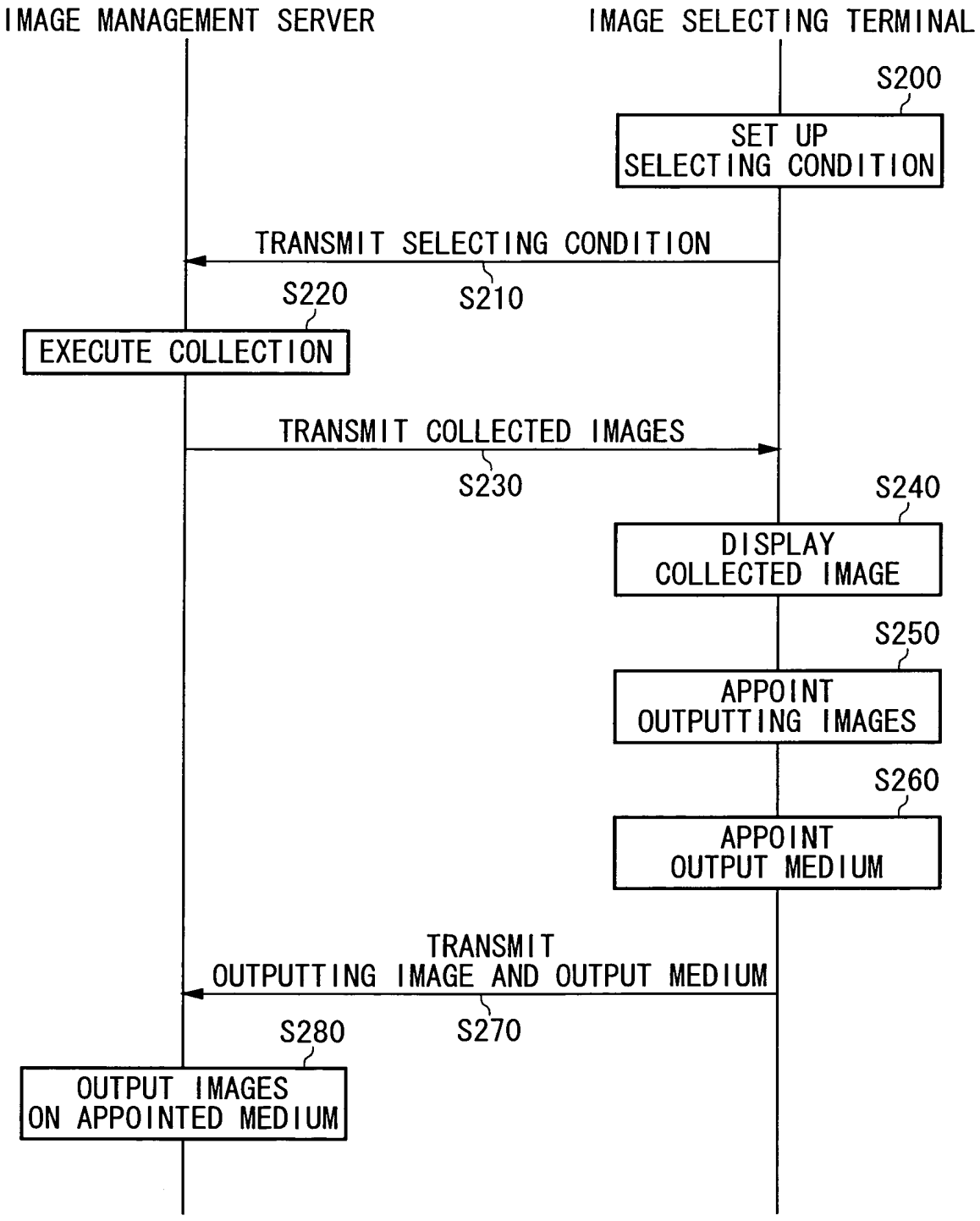


IMAGE MANAGEMENT SERVER
IMAGE SELECTING TERMINAL
S200
SET UP SELECTING CONDITION
TRANSMIT SELECTING CONDITION
S210
S220
EXECUTE COLLECTION
TRANSMIT COLLECTED IMAGES
S230
S240
DISPLAY COLLECTED IMAGE
S250
APPOINT OUTPUTTING IMAGES
S260
APPOINT OUTPUT MEDIUM
TRANSMIT OUTPUTTING IMAGE AND OUTPUT MEDIUM
S270
S280
OUTPUT IMAGES ON APPOINTED MEDIUM

FIG. 13

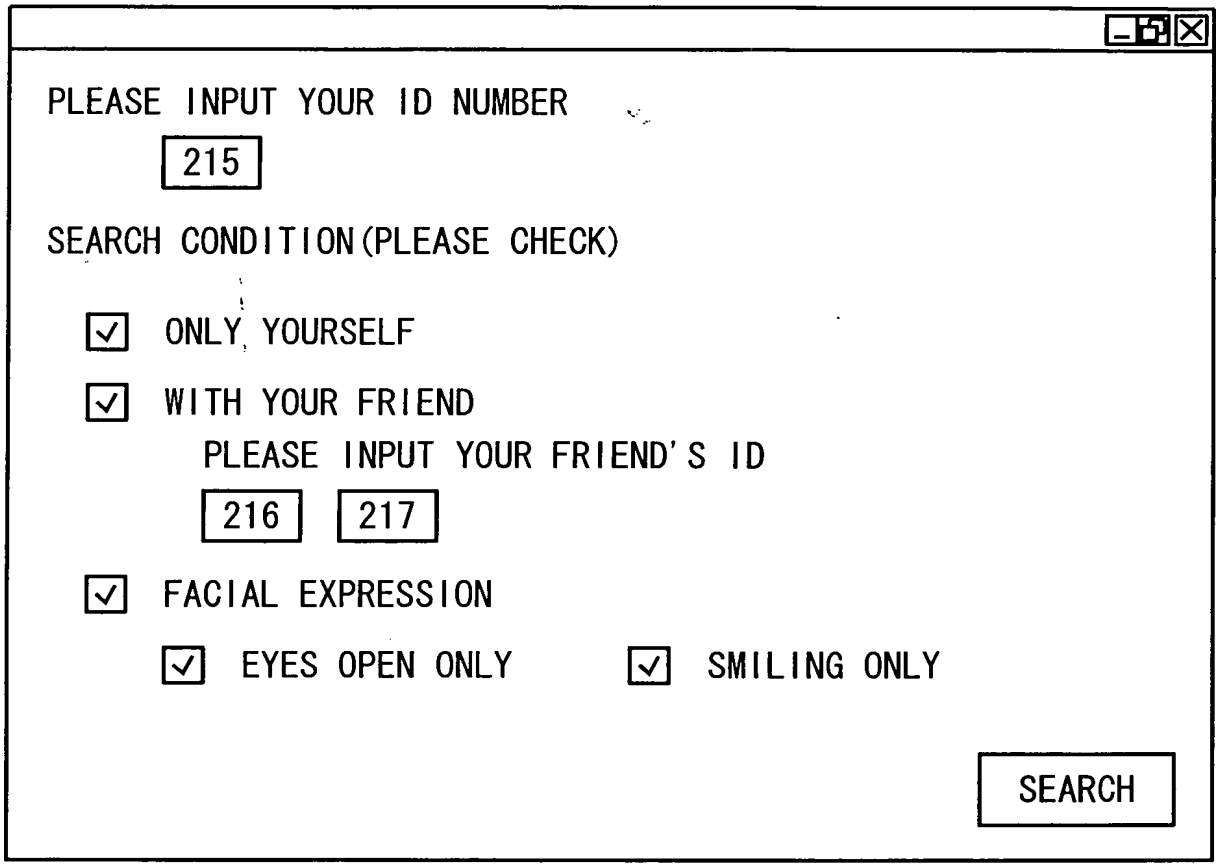


FIG. 14

EP 0 967 584 A2

TOE070 "EO976860

INFORMATION FOR BROWSING COLLECTED IMAGES AND SELECTING OUTPUT SETTING

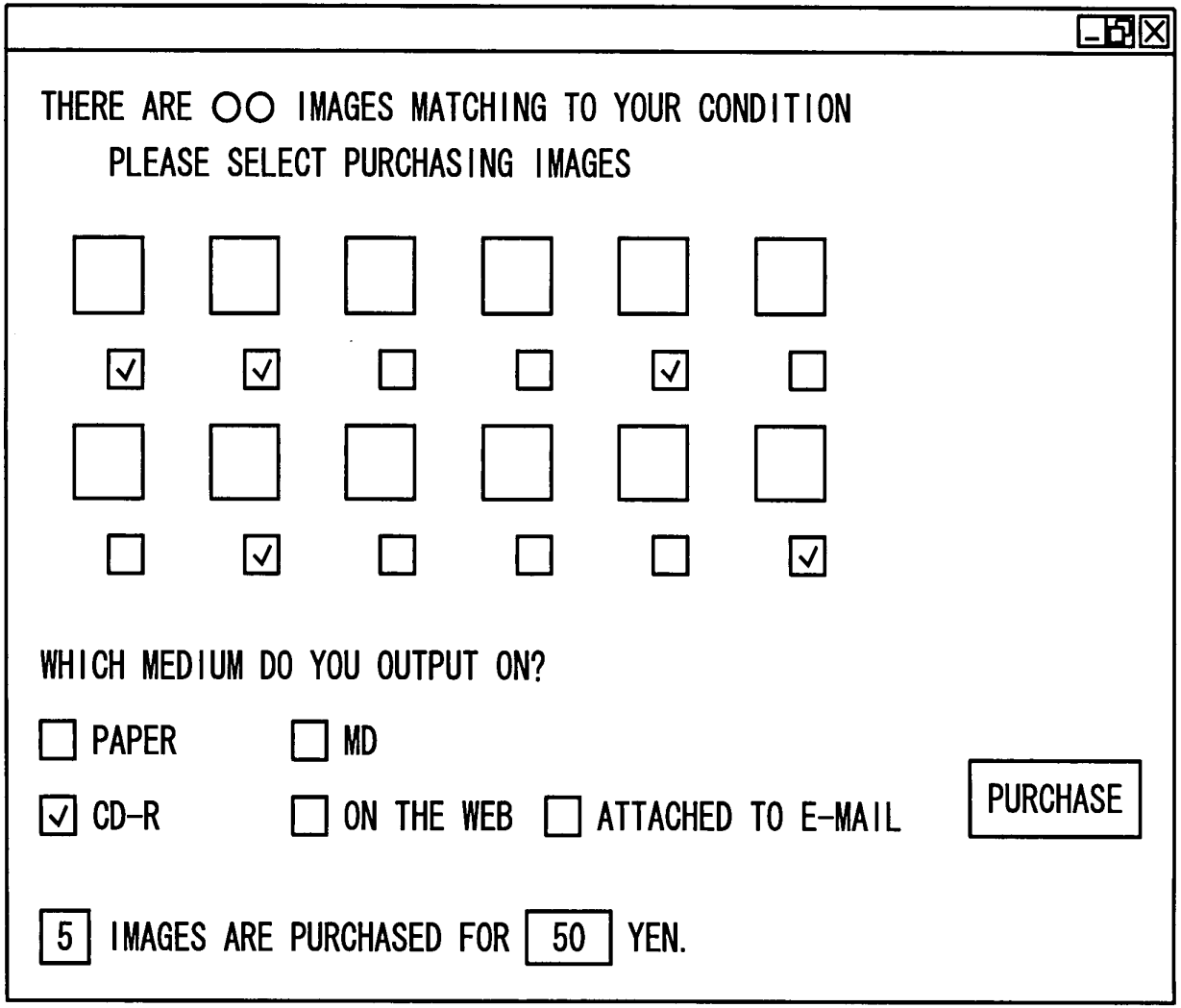


FIG. 15

KAKU
Q65248
IMAGE COLLECTING SYSTEM AND METH
THEREOF
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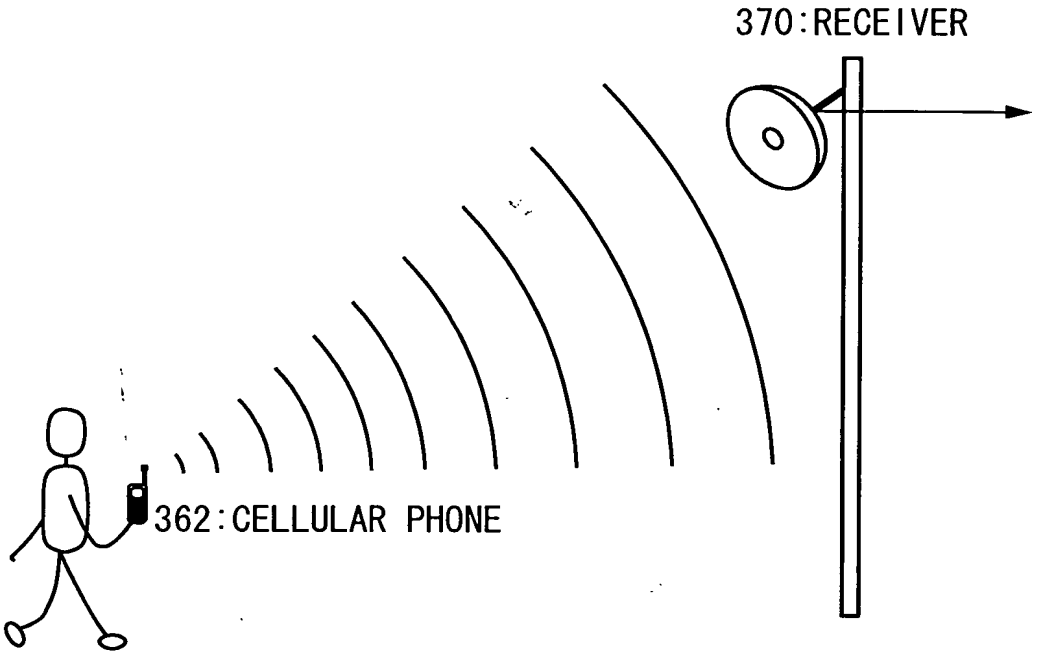

FIG. 16

Express Mail Label No. EV 004 908 968 US

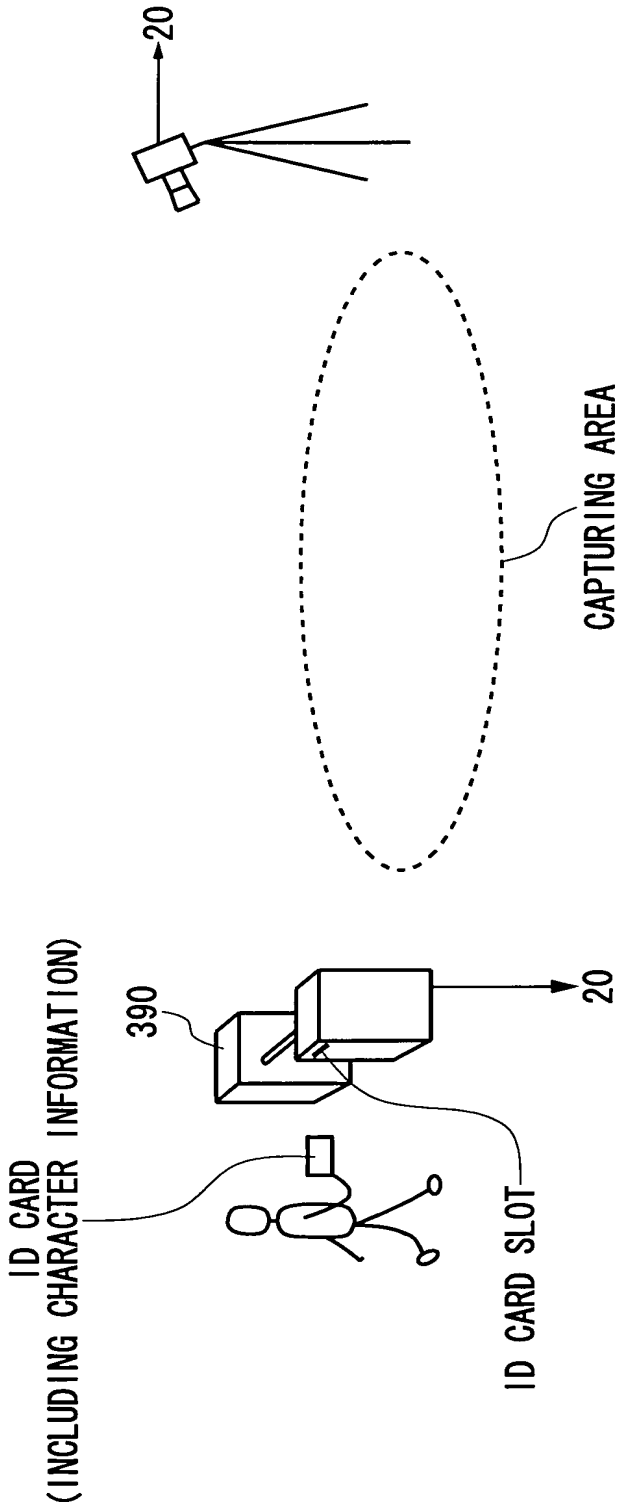

FIG. 17

F0850/0 "20/03/04

POSITION INFORMATION DB

230

CHARACTER ID	1

TIME	PLACE
13:00	POINT A
13:10	POINT A
13:20	POINT B
13:30	POINT B
⋮	

FIG. 18

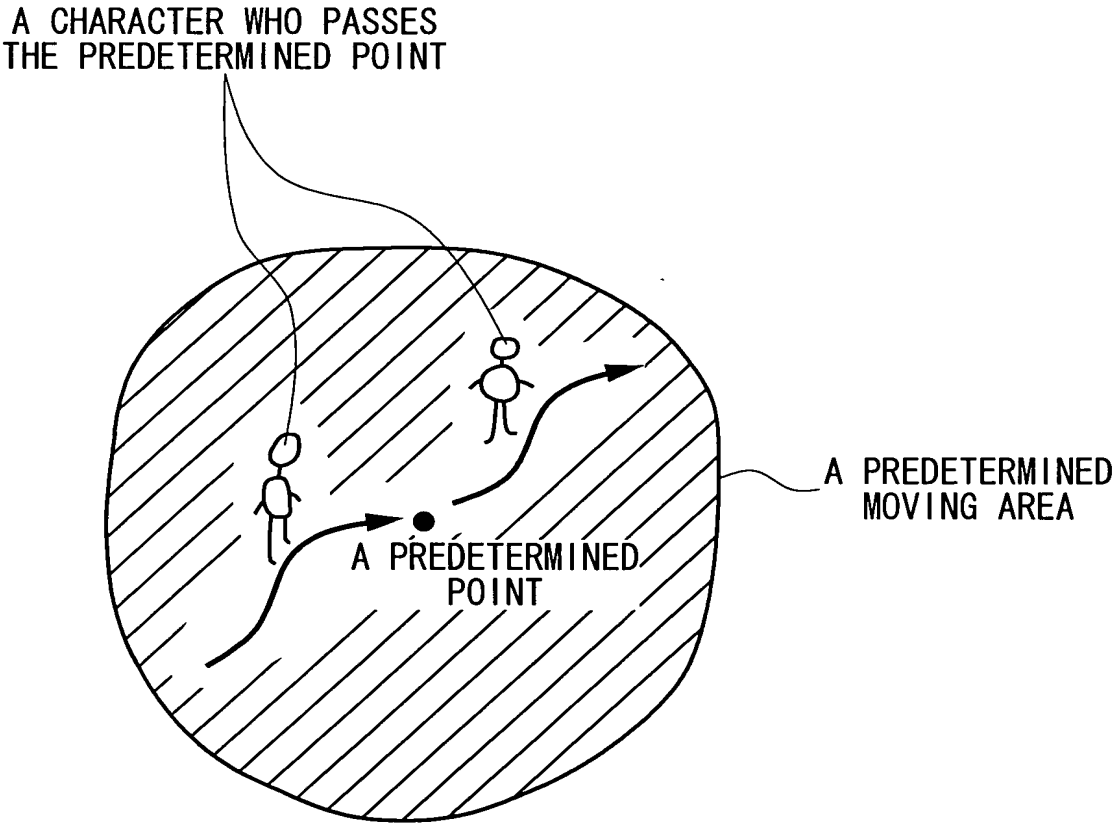

FIG. 19

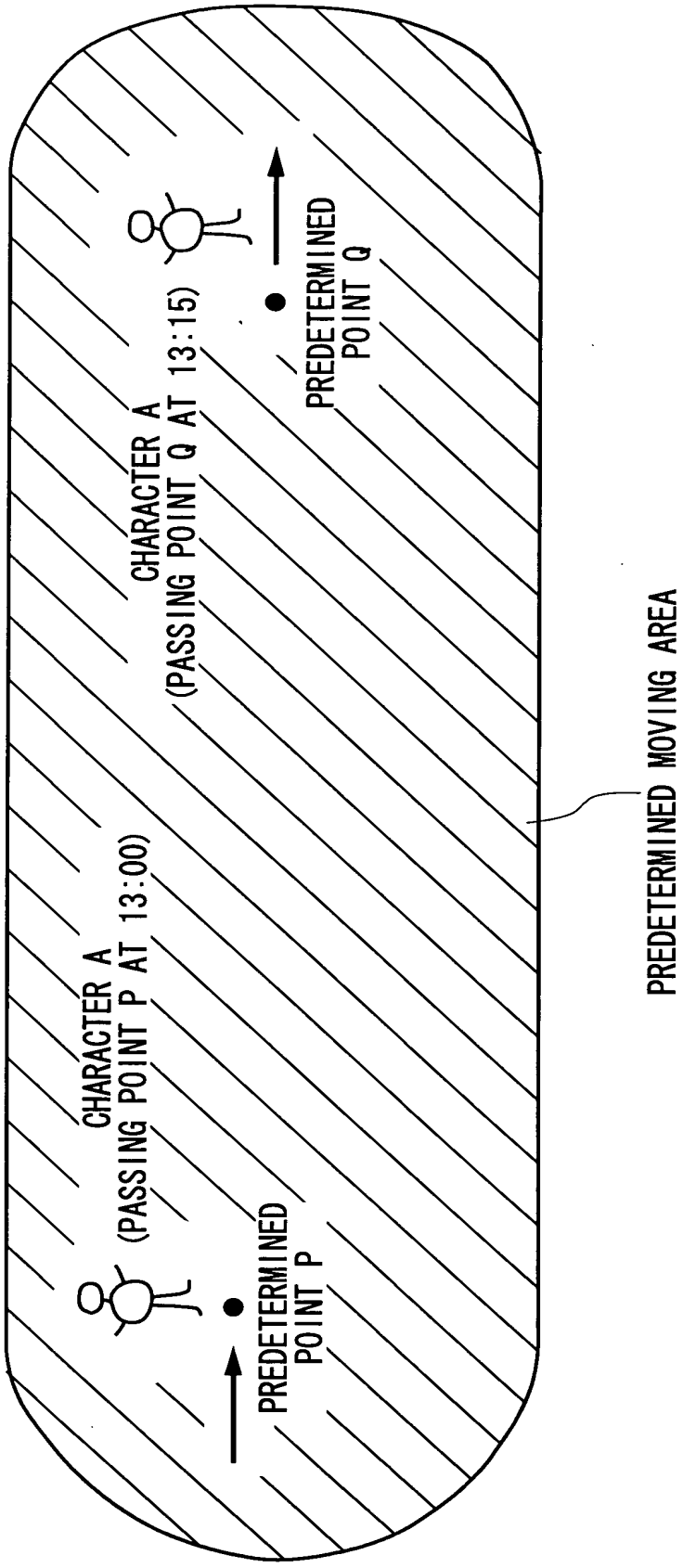

FIG. 20

T0560 "E0926860

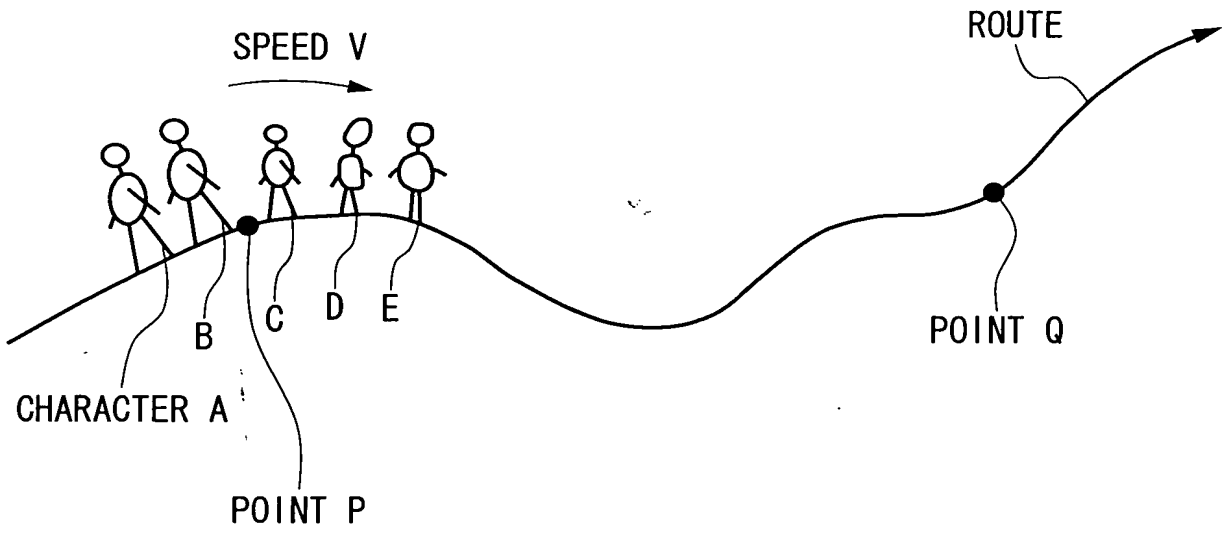

FIG. 21

EP 1 280 094 A2

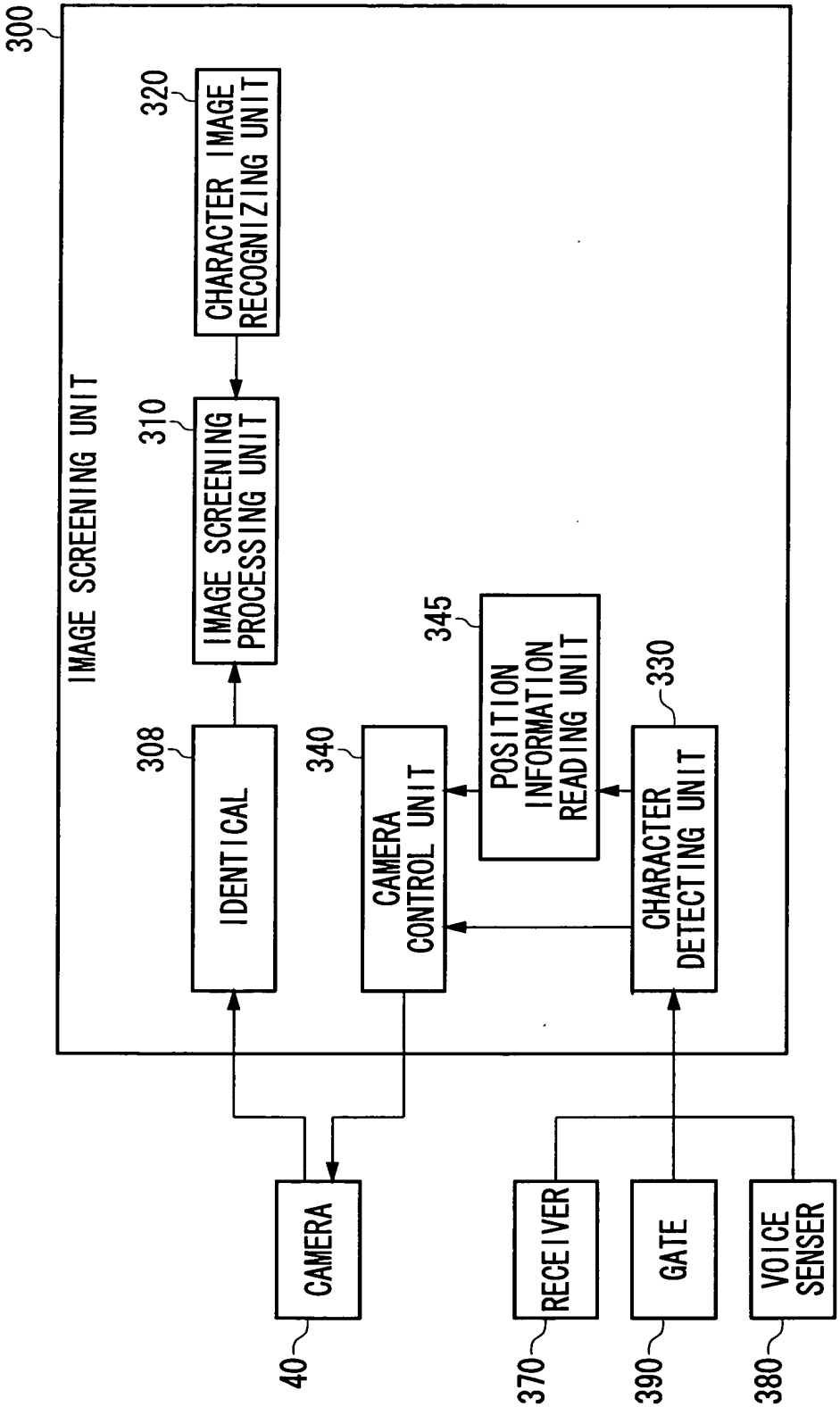

FIG. 22

FP03/40 "EV976860

320:CHARACTER IMAGE RECOGNIZING UNIT

IMAGE DETECTING CONDITION

- CONDITION FOR DELETING IMAGE
  - EYES ARE CLOSED
  - FACIAL EXPRESSION IS ANGRY

○ DETECT × DELETE	○	×	○	×
	IMAGE1	IMAGE2	IMAGE3	IMAGE4

FIG. 23

0500-0503-0504

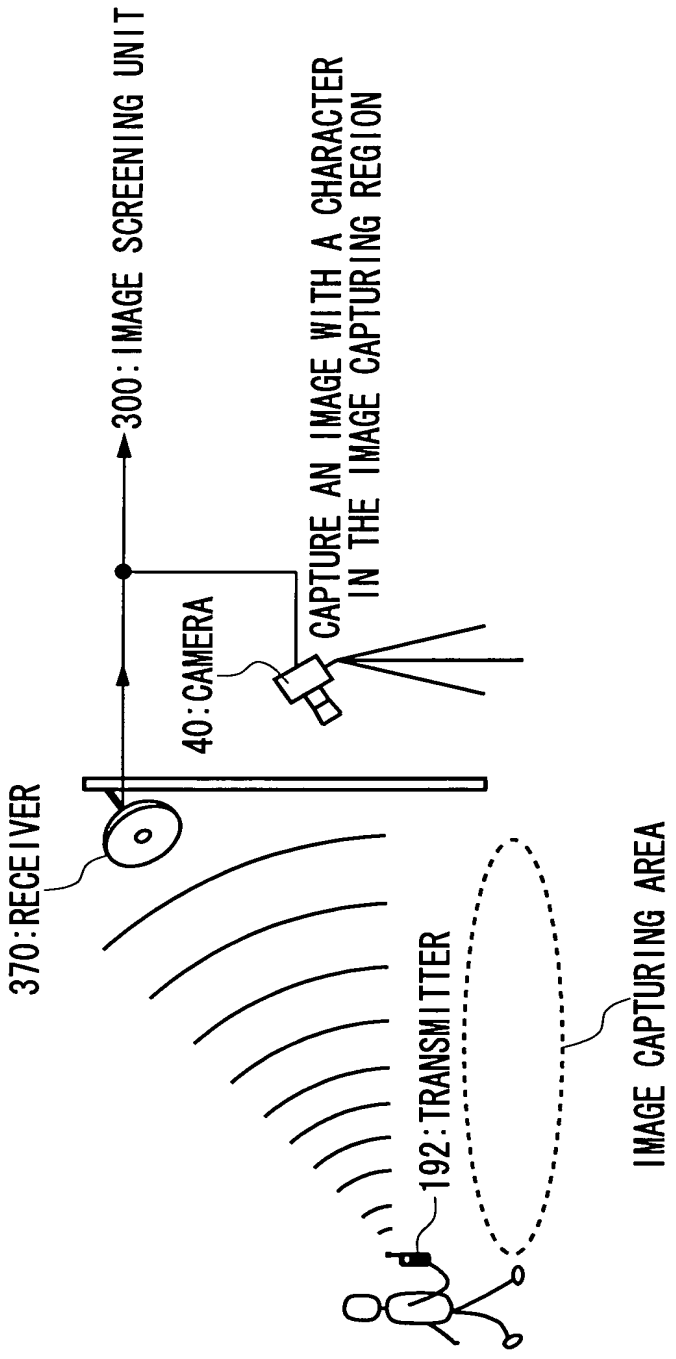

FIG. 24

"Express Mail" Label No. EV339279503US

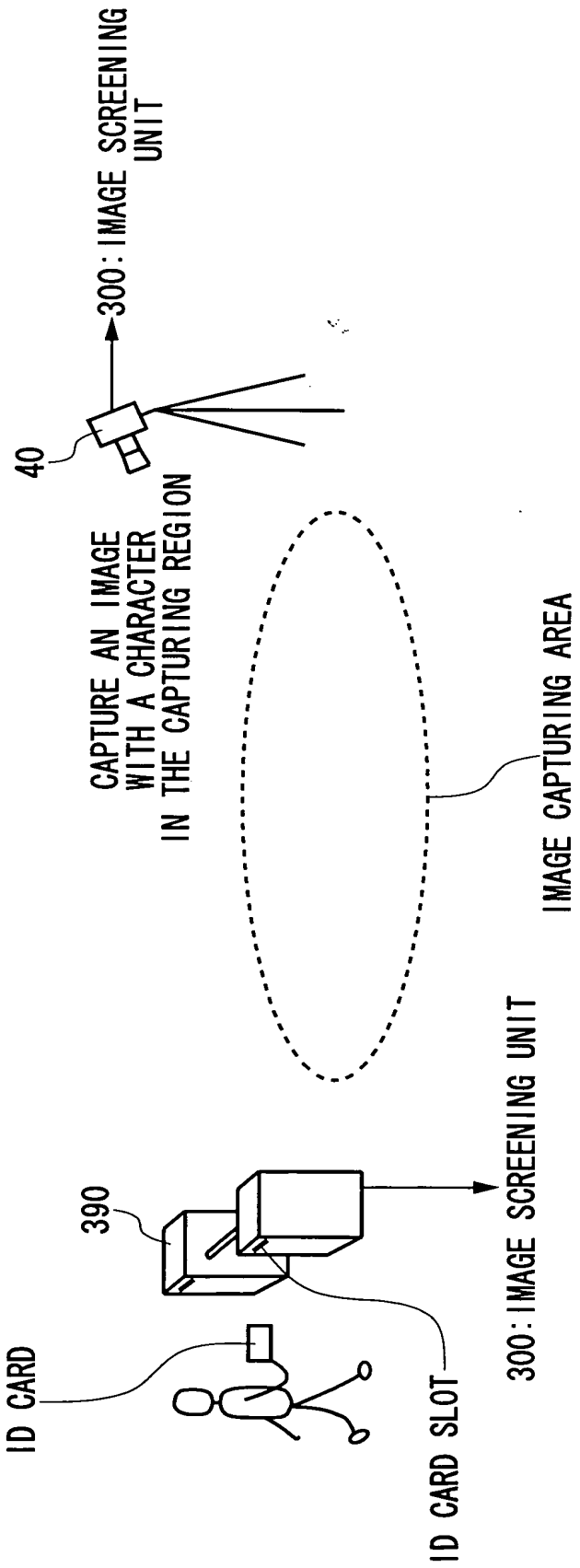

FIG. 25

TOSHIBA: 09/896,860

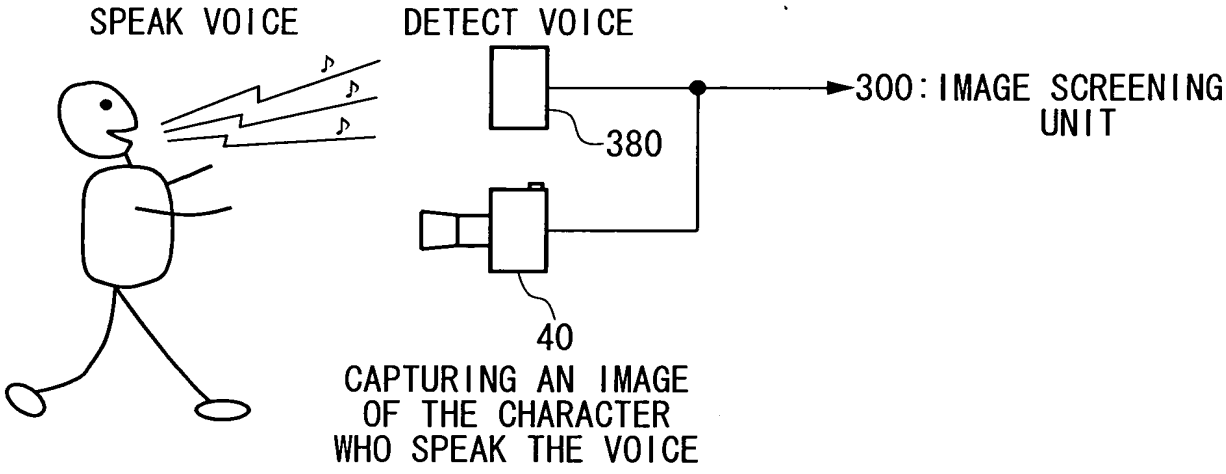

FIG. 26

Docket #Q65248